

IN THE SPECIFICATION:

On page 6 of the English language translation of the specification, please amend the first heading of the specification to appear as follows:

Description Technical Field

On page 6 of the English language translation of the specification, please add a heading between the first and second full paragraphs to appear as follows:

Background

On page 6 of the English Language translation of the specification, please amend the second full paragraph of the specification to appear as follows:

~~DE 100 33 483 A1~~ U.S. Patent No. 6,927,376, for example, describes an axial setting device with ball ramp configurations. It comprises ball grooves with pitches extending in opposite directions in setting disc and pressure disc surfaces which face one another and between which there are held balls. A motor inserted into the housing can be used to rotate the setting disc relative to the pressure disc, so that the distance between the two disc changes, as a result of which the friction plates of the multi-plate coupling are axially loaded.

On page 6 and continuing on page 7 of the English Language translation of the specification, please amend the third full paragraph of the specification to appear as follows:

From ~~DE 100 17 131 C2~~ U.S. Patent No. 6,581,741, there is known an axial setting device with a hydraulic pump for loading the friction plates of a friction coupling or for fixing the viscous plates of a viscous coupling. When the two coupling parts rotate relative to one another, the pump conveys oil from a reservoir into a pressure chamber which is delimited by an axial piston. The oil can return from the pressure piston back into the reservoir through a bypass which is controlled by a solenoid valve.

On page 7 of the English language translation of the specification, please add a heading before the first full paragraph to appear as follows:

Summary Of The Invention

On page 7 of the English Language translation of the specification, please amend the first full paragraph of the specification to appear as follows:

It is ~~the~~ an object of the invention to propose an axial setting device of the initially mentioned type which features a simple design, short reaction times and a small size and thus is also lightweight.

On page 7 of the English Language translation of the specification, please amend the second full paragraph of the specification to appear as follows:

In accordance with an embodiment of the invention, ~~the objective is achieved by~~ an axial setting device for actuating a multi-plate coupling in the driveline of a motor vehicle is provided.[[,]] comprising The device includes a housing in which there are supported two parts so as to be coaxially rotatable relative to one another, which two parts can be coupled to one another by the multi-plate coupling arranged in the housing; a cylinder unit with a hydraulic chamber and a piston which is arranged in the hydraulic chamber so as to be axially displaceable and which is provided for actuating the multi-plate coupling; a hydraulic system for supplying the cylinder unit, comprising a quantity of oil jointly contained in the housing and in the hydraulic chamber, the hydraulic system further comprising a pump which comprises a first connection connected to the housing and a second connection connected to the hydraulic chamber.

On page 8 of the English Language translation of the specification, please amend the first full paragraph of the specification to appear as follows:

The pump ~~is preferably~~ can be firmly connected to the housing, wherein, in the housing, there is provided an aperture connecting the first connection to the interior of the housing and a channel connecting the second connection to the hydraulic chamber. The channel ~~is preferably~~ can be provided in the housing only and the aperture ends in an antechamber which is formed by a cylindrical projection of the housing, in which

projection there is arranged the pump. In a preferred particular embodiment of the invention, a filter element serving to filter particles out of the oil is provided in the hydraulic system between the housing and the first connection of the pump. Said filter element can be arranged either in the aperture of the housing or, according to an alternative embodiment, it may be associated with the first connection of the pump.

On page 8 and continuing on page 9 of the English Language translation of the specification, please amend the second full paragraph of the specification to appear as follows:

According to ~~a~~preferred another embodiment of the invention, a pressure sensor connected to the electronic control unit is arranged between the second connection and the hydraulic chamber. Inter alia, the control unit serves to control the internal pressure in the hydraulic chamber, with the value recorded by the pressure sensor being used as the input value. If, for example as a result of leakage losses at the hydraulic piston or as a result of wear of the coupling plates, the pressure sensor records changes in pressure in the hydraulic chamber, the control unit would react such as to introduce additional oil. Furthermore, the pressure sensor and the control unit can be used to hold the pressure at a constant value. In addition to the pressure sensor or as an alternative, a check valve controllable by the control unit can be provided between the second connection and the hydraulic chamber; it prevents the oil from returning from the hydraulic chamber into the pump, so that the pressure on the piston is held at a constant level. If it is necessary that the oil returns from the hydraulic chamber into the housing, the check valve is released by the control unit.

On page 9 of the English Language translation of the specification, please amend the first full paragraph of the specification to appear as follows:

The pump ~~is~~can be an internal gear pump which comprises a hollow gear with an internal trochoid and a rotor with an external trochoid running eccentrically on a circuit. The hollow gear, along its internal trochoid, comprises a plurality of partially cylindrical recesses in which gears are rotatably held and the rotor, along its external trochoid, comprises a toothed structure which engages the teeth of the gears. This type of design based on the principle of an internal gear pump is advantageous in that leakages and pulsation are reduced. Furthermore, it is ~~characterised~~ characterized by a high degree of efficiency and is relatively cost-effective.

On page 10 of the English language translation of the specification, please add a heading before the first full paragraph to appear as follows:

Brief Description Of The Drawings

On page 10 of the English language translation of the specification, please add a heading between the fourth and fifth full paragraphs to appear as follows:

Detailed Description

On page 10 and continuing on page 11 of the English Language translation of the specification, please amend the fifth full paragraph of the specification to appear as follows:

Figure 1 shows an axial setting device 1 which includes a multi-plate coupling 2. The coupling device formed thereby is arranged in a fixed housing 3. The multi-plate coupling 2 comprises two parts, i.e. a shaft 4 and a carrier 5, which two parts are rotatable relative to one another. A bearing assembly 6 which comprises a radial bearing and an axial bearing serves to support the multi-plate coupling 2 in the housing 3. The multi-plate coupling 2 comprises inner plates directly held in a rotationally fast way on outer teeth of the shaft 4, and outer plates directly held in a rotationally fast way in the carrier 5 on inner teeth. Via engaging teeth, the shaft 4 is connected to the flange 7 provided for being attached to a driveline. The carrier 5 which, by means of a sleeve portion, is axially immovably and rotatably supported in a hub portion of the shaft 4 comprises inner teeth 8 for inserting a shaft (not illustrated). The coupling plates 10 are supported on a supporting disc 9 which is firmly connected to the shaft 4. By means of a pressure disc 11, which is cover-shaped, said coupling plates 10 are loaded by an axial bearing 13 arranged on a step 12 of the pressure disc 11. Between the pressure disc 11 and the shaft 4, there are arranged is a spring means 14 in the form of Belleville spring washers which load the supporting disc 9 and the pressure disc 11 in axially opposed directions. In the condition as illustrated, the inner plates and outer plates are not in contact with one another, so that the shaft 4 is able to rotate freely relative to the carrier 5.

On page 11 of the English Language translation of the specification, please amend the first full paragraph of the specification to appear as follows:

The axial setting device 1 comprises a cylinder unit 15 and a hydraulic system ~~with~~ with a pump 18 for actuating the cylinder unit 15. The cylinder unit 15 comprises a piston 21 which is sealingly arranged in a hydraulic chamber 22 and is held so as to be axially displaceable. The pump 18 comprises an electric motor 19 which can be controlled via an electronic control unit 17, a first connection 23 connected to the housing 3 as well as a second connection 24 connected to the hydraulic chamber 22. The pump 18 is designed in such a way that it is able to convey oil from the housing 3 to the hydraulic chamber 22 and, vice versa, from the hydraulic chamber 22 to the housing 3. In this way, there is formed an open hydraulic system with two interconnected chambers.

On page 11 of the English Language translation of the specification, please amend the second full paragraph of the specification to appear as follows:

The housing 3 is provided with an aperture 25 which permits the supply of oil from the interior of the housing 3 to the first connection 23. The housing comprises a projection 20 in which the pump is sealingly accommodated, so that there is formed an antechamber which the aperture 25 meets with. According to a first embodiment, ~~it is proposed that~~ the aperture 25 receives a filter element 27 which filters impurities out of the oil. The second connection 24 of the pump 18 ends in a channel 28 which, in turn, is connected to the hydraulic chamber 22.

On page 12 of the English Language translation of the specification, please amend the first full paragraph of the specification to appear as follows:

In the housing 3, there is arranged a pressure sensor 29 which serves to measure the internal pressure in the hydraulic chamber 22 and in the channel 28 respectively and which is connected to the control unit 17. When the pressure in the hydraulic chamber 22 drops, for example as a result of leakage losses at the piston 21 or wear at the coupling plates 10, the pump 18 can be activated by the electronic control unit 17 for the purpose of pumping additional oil into the hydraulic chamber 22. In the channel 28, between the pump 18 and the hydraulic chamber 22, there is provided a controllable check valve 31 which prevents oil from returning from the hydraulic chamber 22 back towards the pump 18. If a backflow of oil from the hydraulic chamber 22 into the housing

3 is necessary, the check valve 31 is opened by the control unit 17. In this way, the pressure in the hydraulic chamber 22 is reduced and the piston is axially released. The spring ~~means~~ 14 of the multi-plate coupling 2 now again ~~load loads~~ the pressure disc 11 and the supporting disc 9 in opposed directions, so that the multi-plate coupling 2 is ventilated, with the shaft 4 being able to freely rotate relative to the carrier 5. If, due to special driving conditions, it is necessary for the oil to return from the hydraulic chamber 22 into the housing 3, the oil flow can be accelerated by reversing the direction of rotation of the pump 18. For this purpose, the pump 18 is activated accordingly by the control unit 17, with the check valve 31 simultaneously being opened.

On page 12 and continuing on page 13 of the English Language translation of the specification, please amend the second full paragraph of the specification to appear as follows:

The pump 18 which is shown in detail in Figure 2 comprises a cover 36, a base 37 and, arranged therebetween, a set of pump gears 38 with an outer ring 40 which, jointly, form a cylindrical portion which is accommodated in the pipe-shaped projection 20 of the housing 3. Seals 33 are received in grooves which are arranged in circumferential faces of the cover 36 and of the base 37 and which prevent oil from leaving the housing 3 and dirt from penetrating into the housing 3. In the cover 36 of the pump housing, there are formed the first connection 23 and the second connection 24 which are connected to the housing 3 and to the hydraulic chamber 22 respectively. In front of the first connection 23, a filter element ~~25~~ 35 is attached to the cover 36 and filters impurities out of the oil. To that extent, the embodiment shown in Figure 2 represents an alternative or addition to the embodiment according to Figure 1 in that, in Figure 1, the filter element 27 is arranged in the aperture 25 of the housing 3. At the base 37, there is attached a flange 34 which, together with a flange at the housing of the electric motor 19, serves to fix the pump 18 to the housing 3 by ~~means of fixing means (not shown)~~ fasteners.